

AMENDMENTS TO THE CLAIMS:

The listing of claims will replace all prior versions, and listings of claims in the application:

LISTING OF CLAIMS:

1. (Cancelled)

2. (Currently Amended) The method of claim 14, wherein the reference level is a current at which the motor is to be operated.

3. (Currently Amended) The method of claim 14, wherein step (c) comprises:

determining that the motor is stalled when the amount of time is less than a threshold value.

4. (Currently Amended) ~~The A method of claim 1, wherein step (c) comprises for detecting a state of an electric motor comprising:~~

(a) ~~energizing the motor with electrical power such that an associated current applied to the electric motor rises over time toward a reference level;~~

(b) ~~determining an amount of time that elapses between when the motor is energized and the reference level is reached; and,~~

(c) ~~evaluating a state of the motor based upon the determined amount of time, said evaluating including determining a speed of the motor based upon the determined amount of time.~~

5. (Currently Amended) The method of claim 14, wherein step (b) comprises:

measuring the amount of time that elapses.

6. (Cancelled)

7. (Currently Amended) ~~The A method of claim 6, wherein step (b) comprises for detecting an operational state of an electric motor comprising:~~

(a) supplying electrical power to the motor, said electrical power having a current waveform and a voltage waveform, wherein in an initial rise time period that starts at a time the electrical power is supplied to the motor, the current waveform rises toward a reference level and the voltage waveform remains substantially steady, and in a chopping time period following the rise time period the voltage waveform is cycled on and off and the current waveform rises and falls accordingly;

(b) monitoring the voltage waveform through a low-pass filter and sampling a voltage therefrom after a selected delay from the start of the initial rise time period; and,

(c) determining an operational state of the motor from the monitoring of the voltage waveform.

8. (Original) The method of claim 7, wherein step (c) comprises:
identifying the motor as stalled when the sampled voltage is below a threshold level.

9. (Cancelled)

10. (Cancelled)

11. (Cancelled)

12. (Cancelled)

13. (Currently Amended) The motorization assembly of claim ~~4216~~,
wherein the electric motor is a stepper motor.

14. (Currently Amended) The motorization assembly of claim ~~4216~~,
wherein the amplifier is a chopper amplifier.

15. (Currently Amended) The motorization assembly of claim ~~4217~~,
wherein the detection means includes:
a timer that measure the amount of time that elapses.

16. (Currently Amended) ~~The A~~ motorization assembly of claim 12,
wherein the detection means includes comprising:

an electric motor;

an amplifier that selectively supplies the motor with electric power to thereby drive the same, such that when the power is supplied an associated current is generated that rises over time toward a reference level;

detection means for determining an amount of time that elapses between when electrical power is supplied and when the reference level is reached by the current, said detection means including a ~~an~~ RC circuit that produces a voltage proportional to the amount of time that elapses; and,

analyzing means for evaluating a state of the motor based on the determination of the detection means.

17. (Currently Amended) ~~The A~~ motorization assembly of claim 12,
wherein the comprising:

an electric motor;

an amplifier that selectively supplies the motor with electric power to thereby drive the same, such that when the power is supplied an associated current is generated that rises over time toward a reference level;

detection means for determining an amount of time that elapses between when electrical power is supplied and when the reference level is reached by the current; and,

analyzing means for evaluating a state of the motor based on the determination of the detection means, said analyzing means determines determining a speed of the motor.

18. (Currently Amended) The motorization assembly of claim 12,
wherein the analyzing means determines if the motor is stalled.

19. (Cancelled)

20. (Currently Amended) ~~The A~~ motorized system of claim 20, said detection means comprising:

an electric motor;

an amplifier that selectively supplies the motor with electric power to thereby drive the same, such that when the power is supplied an associated current is generated that rises over time toward a reference level;

detection means for monitoring the supplied electrical power, said detection means including a conditioning circuit through which a voltage associated with the supplied electrical power is sampled at a selected time delay after the electrical power is initially supplied, wherein the conditioning circuit is configured and the time delay selected so that the sampled voltage is below a threshold level when the motor is stalled; and,

analyzing means for evaluating a state of the motor based on the monitoring of the detection means.